

ABSTRACT OF THE INVENTION

A method and apparatus for employing a light shield to modulate pixel color responsivity. The improved pixel includes a substrate having a photodiode with a light receiving area. A color filter array material of a first color is disposed above the substrate. The pixel has a first relative responsivity. A light shield is disposed above the substrate to modulate the pixel color responsivity. The light shield forms an aperture whose area is substantially equal to the light receiving area adjusted by a reduction factor. The reduction factor is the result of an arithmetic operation between the first relative responsivity and a second relative responsivity, associated with a second pixel of a second color.